

WHAT IS CLAIMED IS:

1. A method for providing a variety of disparate host devices access to digital images residing on a digital camera device, the method comprising:

5 connecting the digital camera device to a particular host device that is capable of hosting digital camera devices;

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A1 } automatically identifying the particular host device that the digital camera device is currently connected to, including determining communication information allowing communication between the digital camera device and the particular host device;

10 based on said determined communication information, establishing a communication session between the digital camera device and the particular host device, said communication session supporting photo-serving communication protocols that present the digital camera device as a file server to the host device; and

15 through said photo-serving communication protocols, allowing the host device to access digital images residing on the digital camera device, as if the digital camera device were a file server.

2. The method of claim 1, wherein said connecting step includes:

20 connecting the digital camera device to a particular host device over a wireless communication medium.

3. The method of claim 1, wherein said connecting step includes:

connecting the digital camera device to a particular host device over a wireline communication medium.

25 4. The method of claim 3, wherein said wireline communication medium

includes a selected one of serial (RS-232) and USB (Universal Serial Bus) connectivity.

5. The method of claim 1, wherein said particular host device comprises a computing device.

6. The method of claim 1, wherein said particular host device comprises a handheld computing device.

7. The method of claim 1, wherein said particular host device comprises a cellular phone device.

8. The method of claim 1, wherein said particular host device and said digital camera device support TCP/IP connectivity.

9. The method of claim 1, wherein said particular host device includes facilities for offloading digital images from said digital camera device.

10. The method of claim 1, wherein said particular host device includes facilities for manipulating digital images, while those digital images reside on said digital camera device.

11. The method of claim 1, wherein said identifying step occurs immediately upon connection of the digital camera to the particular host device.

12. The method of claim 1, wherein said identifying step includes:
probing the particular host device in a query/response fashion, for identifying the particular host device.

13. The method of claim 12, wherein said probing step includes:
referencing a knowledgebase that stores expected responses, for identifying the particular host device.

14. The method of claim 13, wherein said expected responses comprise factory preset values.

15. The method of claim 13, wherein said knowledgebase is stored in a registry of the digital camera device.

16. The method of claim 1, wherein said communication session established between the digital camera device and the particular host device employs TCP/IP.

17. The method claim 1, wherein said photo-serving communication protocols comprise a photo-specific interface allowing the particular host device to directly access digital images on a per-file basis, while those images reside on the digital camera device.

18. The method of claim 1, wherein said photo-serving communication protocols comprise a command set providing the particular host device with file-based access and manipulation of digital images residing on the digital camera device.

19. The method of claim 1 further comprising:
providing host-side support for the photo-serving communication protocols by injecting an appropriate driver into the particular host device.

20. The method of claim 19, wherein the appropriate driver is initially stored on said digital camera device and is injected into the particular host device upon connection of the two devices together.

21. A method for providing a variety of disparate host devices access to files residing on a portable device, upon the portable device's connection to one of the host devices, the method comprising:

connecting the portable device to a particular host device that is capable of hosting the portable device;

automatically identifying the particular host device that the portable device is currently connected to, including determining communication information allowing communication between the portable device and the particular host device; and

based on said determined communication information, performing substeps of:

(1) establishing a communication session between the portable device and the particular host device, said communication session supporting file-serving communication protocols that present the portable device as a file server to the host device; and

(2) if needed by the host for supporting said file-serving communication protocols, automatically uploading a driver from the portable device to the particular host device and thereafter invoking execution of the driver at the particular host device, for providing host-side support for said file-serving communication protocols.

22. The method of claim 21, wherein said connecting step includes: connecting the portable device to a particular host device over a wireless communication medium.

23. The method of claim 21, wherein said connecting step includes: connecting the portable device to a particular host device over a wireline communication medium.

24. The method of claim 23, wherein said wireline communication medium includes a selected one of serial (RS-232) and USB (Universal Serial Bus) connectivity.

25. The method of claim 21, wherein said particular host device comprises a computing device.

26. The method of claim 21, wherein said particular host device comprises a handheld computing device.

27. The method of claim 21, wherein said particular host device comprises a cellular phone device.

28. The method of claim 21, wherein said particular host device and said portable device support TCP/IP connectivity.

29. The method of claim 21, wherein said particular host device includes facilities for offloading files from said portable device.

30. The method of claim 21, wherein said particular host device includes facilities for manipulating files, while those files reside on said portable device.

31. The method of claim 21, wherein said identifying step occurs immediately upon connection of the portable device to the particular host device.

32. The method of claim 21, wherein said identifying step includes:
probing the particular host device in a query/response fashion, for identifying the particular host device.

33. The method of claim 32, wherein said probing step includes:
referencing a knowledgebase that stores expected responses, for identifying the particular host device.

34. The method of claim 33, wherein said expected responses comprise factory preset values.

35. The method of claim 33, wherein said knowledgebase is stored in a registry of the portable device.

36. The method of claim 21, wherein said communication session established between the portable device and the particular host device employs TCP/IP.

37. The method claim 21, wherein said file-serving communication protocols comprise a file-specific interface allowing the particular host device to directly access files, while those files reside on the portable device.

38. The method of claim 21, wherein said file-serving communication protocols comprise a command set providing the particular host device with file-based access and manipulation of files residing on the portable device.

39. The method of claim 21, further comprising:
providing host-side support for the file-serving communication protocols by injecting an appropriate driver into the particular host device.

40. The method of claim 39, wherein the appropriate driver is initially stored on said portable device and is injected into the particular host device upon connection of the two devices together.

41. A portable device allowing a variety of disparate host devices access to files residing on the portable device, upon the portable device's connection to one of the host devices, the portable device comprising:

a connection interface for connecting the portable device to a particular host device that is capable of hosting the portable device;

an identification module for automatically identifying the particular host device that the portable device is currently connected to, including determining

communication information allowing communication between the portable device and the particular host device;

a communication module for establishing a communication session between the portable device and the particular host device, wherein said communication session supports file-serving communication protocols that present the portable device as a file server to the host device; and

a driver injection module for providing host-side support for said file-serving communication protocols if not already present, said driver injection module operating by automatically uploading a driver from the portable device to the particular host device and thereafter invoking execution of the driver at the particular host device, so that the host device may access files residing on the portable device, as if the portable device were a file server.

42. The device of claim 41, wherein said connection interface supports connecting the portable device to a particular host device over a wireless communication medium.

43. The device of claim 41, wherein said connection interface supports connecting the portable device to a particular host device over a wireline communication medium.

44. The device of claim 43, wherein said wireline communication medium includes a selected one of serial (RS-232) and USB (Universal Serial Bus) connectivity.

45. The device of claim 41, wherein said particular host device comprises a computing device.

46. The device of claim 41, wherein said particular host device comprises a handheld computing device.

47. The device of claim 41, wherein said particular host device comprises a cellular phone device.

48. The device of claim 41, wherein said particular host device and said portable device support TCP/IP connectivity.

49. The device of claim 41, wherein said particular host device includes facilities for offloading files from said portable device.

50. The device of claim 41, wherein said particular host device includes facilities for manipulating files, while those files reside on said portable device.

51. The device of claim 41, wherein said identification module operates to identify the particular host device immediately upon connection of the portable device to the particular host device.

52. The device of claim 41, wherein said identification module probes the particular host device in a query/response fashion, for identifying the particular host device.

53. The device of claim 52, wherein said identification module references a knowledgebase that stores expected responses, for identifying the particular host device.

54. The device of claim 53, wherein said expected responses comprise factory preset values.

55. The device of claim 33, wherein said knowledgebase is stored in a registry of the portable device.

56. The device of claim 41, wherein said communication session established between the portable device and the particular host device employs TCP/IP.

5 57. The device claim 41, wherein said file-serving communication protocols comprise a file-specific interface allowing the particular host device to directly access files, while those files reside on the portable device.

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10 AI } 58. The device of claim 41, wherein said file-serving communication protocols comprise a command set providing the particular host device with file-based access and manipulation of files residing on the portable device.

15 59. The device of claim 41, wherein the driver injection module stores an appropriate driver initially on said portable device, wherein the driver is injected into the particular host device upon connection of the two devices together.

60. The device of claim 41, wherein the communication session is initially established using Point-to-Point protocol.

20 61. The device of claim 41, wherein said file-serving communication protocols include FTP (File Transport Protocol) support.

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